In The Specification:

Amend the paragraph beginning on page 1, line 3; page 4, line 6; page, 5 line 3; page 5, line 14; page 5 line 23; and page 6, line 10 as follows:

Paragraph beginning on page 1, line 3:

A connector includes sheet metal contacts (40, 42) with termination ends (60, 62) for terminating to wires and with mating ends (70, 72) for mating to other contact devices such as circuit board pads. Each terminating end includes a wide groove part (90) with a groove bottom (94) that receives the wire insulation and with a pair of wide groove part wings (96, 98) that are crimped around the insulation. Each termination end also includes a narrow groove part (100) for receiving a bared conductor of the wire, the narrow groove part having a bottom (104) that is offset from the wide groove part bottom (94), and the narrow groove part having a pair of narrow groove part wings (106, 108) that are crimped around the wire conductor. ~~The mating end of each contact forms a resilient end beam (120) with a straight beam middle (124) that extends at an incline (B) away from the front face (22) of a connector frame (36), the end beam having an outer end (146) connected by an outer bend (152) to a beam free outer portion (150). The beam free outer portion extends at an angle (C) of less than 135° to the beam middle, as measured at the inside of the outer bend. A spherical bump (130) is formed at the outer end of the beam middle.~~

Paragraph beginning on page 4, line 6:

Fig. 1 shows a connector system 10 which includes a housing 12 having a plurality of tunnels 14 that each can receive a connector 16. The system includes large connectors 20 that are used for transmitting power, and small connectors 22 that are used for transmitting signals. The large connectors 20 lie closely (occupy at least 90% of the cross-section) in large tunnels 30 of the housing, while the small connectors 22 lie closely in small tunnels 32 of the housing. Each connector has a frame 34, 36 with contact-holding passages 38 that hold contacts, there

being large contacts 40 in the large connectors and small contacts 42 in the small connectors. Each passage is elongated in a longitudinal direction L. Each of the contacts has a projecting portion 44 that engages a mating device, such as a pad on a circuit board, and each contact is connected to a wire 50, 5 2. The large number of contacts that must be terminated to a corresponding large number of wires, makes it important that each contact be constructed at low-cost and be easily terminated to a wire.

Paragraph beginning on page 5, line 3:

Fig. 8 shows a wire 50 with the insulation 110 lying in the wide groove part bottom 94 and with the bared end 112 of the conductor 114 lying in the narrow groove part bottom 104. There is an offset A between the groove bottoms 94, 104, the offset A being equal to one half the difference in outside diameters of the wire insulation 110 and of the wire conductor 114. After the wire has been laid in place, the wide part wings 96, 98 are crimped around the insulation, and the narrow part wings 106, 108 are crimped around the bared conductor, to complete the termination of the wires to the contacts. Fig. 7 shows that alternate contacts 40A, 40B have their termination ends lying at different heights and not aligned laterally but spaced longitudinally L, which facilitates crimping despite a small pitch (center-to-center lateral distance) of the contacts. The figure shows that the contacts are elongated in the longitudinal direction.

Paragraph beginning on page 5, line 14:

As shown in Fig. 11, the mating end 70 of each contact includes an end beam 120 that projects forward of the front end face 122 of the frame. The frame face extends perpendicular to the direction L of elongation of the contact passages. The end beam has a beam middle 124 that extends at an initial incline angle B of about 20° from the plane of the frame front face 122. An outer end 126 of the beam middle actually engages a circuit board pad or other mating contact device when the connector 20 or 22 is pressed forward F towards the pad.

Applicant provides a bump 130 at the outer end of the beam middle to provide more concentrated force against the mating contact device. The radius of curvature of the convex side of the bump is no more than four times the sheet metal thickness.

Paragraph beginning on page 5, line 23:

Figs. 5 and 6 show details of the contact mating portion 70. The beam middle 120 is straight, in that any radius of curvature is at least twice the length of the beam middle. The beam middle has an inner end 140 connected to a main contact portion 142 by an inner bend 144. At the outer end 126 of the beam middle, the beam middle connects to a beam free outer part 150 by an outer bend 152. The outer bend forms an angle C less than 135° as measured at the inside of the bend. In the prior art, a bend of a few degrees less than 180° was used. The bend allows the free outer part to project back into the frame passage 38, where it is protected from damage. Applicant prefers to provide a largely spherical bump 130 on the outer end 126 of the beam middle. This results in greater pressure against a mating device, such as a conductive pad 154 on a circuit board. The bump is convexly curved about two axes that both extend parallel to the plane of the frame end face 22. This can be done by outwardly bending the sheet metal of the contact, as shown in Fig. 6, which creates a recess ~~154~~ 156.

Paragraph beginning on page 6, line 10:

Figs 3A and 4A show cross sections of the large contact 40 that is used to carry power currents and of the small contact 42 that is used to carry signals (which have small currents). Both contacts are formed of sheet metal, but with the sheet metal of the large contact having a thickness D that is usually at least 150% of the thickness E of the sheet-metal of the small contact 42. The large contact also usually has a somewhat larger width K than the small contact width P. The stiffness of a beam increases with the third power of its thickness, so the end beam of the large contact 40 tends to be stiffer because of its large thickness D.

To increase the resilience of the end beam of the large contact, applicant increases the height J (Fig. 6) of the end beam of the large power contact so it is at least 150% of the height of the beam of the small signal contact. As shown in Fig.1, this results in the thickness G of the large connector being greater than the thickness H of the small connector. In a connector that applicant has designed, the large contact 40 was formed of sheet metal having a thickness D (Fig. 3A) of 20 mils (one mil equals one thousandth inch) while the small contact 42 had a thickness E of 10 mils. As shown in Fig. 7, each end beam has a height J that is a plurality of times its width K, and each passage 38 has a height M that is a plurality of times its width N.